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24352 D/14 KAO SOAP KK C04

KAOS 10.07.79 \*J56014-494

10.07.79-JP-087071 (12.02.81) C05d-01 C05g-03
Caking-resisiant potassium-contg. fertiliser compsn. - contains amine salt of opt. satd. fatty acid

C(5-A1A, 10-C4E, 12-M11, 12-N9). 4

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either naturally occurring one or synthetic one, and contains as major component potassium chloride or potassium sulphate.

EXAMPLE

Potassic fertilizer composition has added to it 0.001-0.1 wt. % of one or more cpds. selected from sodium salt, potassium salt, ammonium salt, calcium salt, magnesium salt, iron salt, iron salt, and idethanolamine salt, triethanolamine salt, monomethylamine salt, dimethylamine salt and trimethylamine salt of 12-18C saturated or unsaturated fatty acid.

ADVANTAGES

Caking of the potassic fertilizer during storage can be prevented by addition of the fatty acid salt. Further, fatty acid salt does not produce an unpleasant smell or phytotoxicity. (Although alkylsulphate and alkylbenzenesulphonate show excellent effect in the prevention of caking of nitrogenous fertilizer, they cannot prevent the caking of potassic fertilizers).

DETAILS

The addition amount of the fatty acid salt is 0.001-0.1
wt.% preferably 0.005-0.5 wt.% Potassic fertilizer can be

Caking prevention test is conducted using a potassic fertilizer made in Canada. Sodium stearate, potassium laurate and calcium stearate show 99.2% 97.4% and 98.0% prevention, respectively, at an addition amount of 0.01 wt.% On the other hand, aluminium stearate and sodium caprate show only 58.2% and 68.8% prevention at an addition amount of 0.01 wt.% (4ppW108).

J560: 4494